

**APPENDIX B:**  
**Nest Habitat Data**

## NESTING HABITAT CHARACTERISTICS

Date: 26 August 1996

Study Area: Kuna Butte

Location Name: DAIRY #2 (SUCCESSFUL)

### BURROW MEASUREMENTS

Burrow entrance height: 16 cm

Burrow entrance width: 25 cm

Height of mound: 4 cm

Compass direction of entrance: 330°

Slope of entrance: 0.675

Distance to nearest burrow: 3.9 m

Number of burrows within 10 m radius: 2

Distance to nearest occupied burrow: 524 m

Livestock manure at burrow entrance: YES

### VEGETATION

Average vegetation height 0.5 m from burrow: 40 cm

Average vegetation height within 2 m radius: 45 cm

Percentage of each ground cover type:

Cheatgrass (*Bromus tectorum*): 90

Rabbitbrush (*Chrysothamnus* sp.): 0

Irrigated agriculture: 0

Tumble mustard (*Sisymbrium altissimum*): 8

Rock: 0

Annual wheatgrass (*Eremopyrum triticeum*): 0

Sagebrush (*Artemisia* sp.): 1

Bare ground: 0

Clasping peppergrass (*Lepidium perfoliatum*): 0

Other: 1

### OTHER MEASUREMENTS

Distance to nearest perch: 0.7 m

Perch type: wooden T-perch (placed by researchers)

Height of perch: 103.0 cm

Distance to irrigated agriculture: 105 m (corn)

Distance to nearest road: 83 m (gravel)

Distance to nearest source of water: 103 m (irrigation ditch)

## NESTING HABITAT CHARACTERISTICS

Date: 26 August 1996

Study Area: Kuna Butte

Location Name: DAIRY #6 (SUCCESSFUL)

### BURROW MEASUREMENTS

Burrow entrance height: 20 cm

Burrow entrance width: 22 cm

Height of mound: 8 cm

Compass direction of entrance: 150°

Slope of entrance: 0.754

Distance to nearest burrow: 28.4 m

Number of burrows within 10 m radius: 0

Distance to nearest occupied burrow: 233 m

Livestock manure at burrow entrance: NO

### VEGETATION

Average vegetation height 0.5 m from burrow: 45 cm

Average vegetation height within 2 m radius: 50 cm

Percentage of each ground cover type:

Cheatgrass (*Bromus tectorum*): 80

Rabbitbrush (*Chrysothamnus* sp.): 0

Irrigated agriculture: 0

Tumble mustard (*Sisymbrium altissimum*): 20

Rock: 0

Annual wheatgrass (*Eremopyrum triticeum*): 0

Sagebrush (*Artemisia* sp.): 0

Bare ground: 0

Clasping peppergrass (*Lepidium perfoliatum*): 0

Other: 0

### OTHER MEASUREMENTS

Distance to nearest perch: 55 m

Perch type: wood fence post

Height of perch: 131 cm

Distance to irrigated agriculture: 450 m (corn)

Distance to nearest road: 62 m (gravel)

Distance to nearest source of water: 74 m (sewage lagoon)

## NESTING HABITAT CHARACTERISTICS

Date: 26 August 1996

Study Area: Kuna Butte

Location Name: DAIRY #7 (UNSUCCESSFUL)

### BURROW MEASUREMENTS

Burrow entrance height: 24 cm

Burrow entrance width: 28 cm

Height of mound: 8 cm

Compass direction of entrance: 235°

Slope of entrance: 0.625

Distance to nearest burrow: 5.6 m

Number of burrows within 10 m radius: 3

Distance to nearest occupied burrow: 233 m

Livestock manure at burrow entrance: NO

### VEGETATION

Average vegetation height 0.5 m from burrow: 50 cm

Average vegetation height within 2 m radius: 52 cm

Percentage of each ground cover type:

Cheatgrass (*Bromus tectorum*): 85

Rabbitbrush (*Chrysothamnus* sp.): 3

Irrigated agriculture: 0

Tumble mustard (*Sisymbrium altissimum*): 10

Rock: 0

Annual wheatgrass (*Eremopyrum triticeum*): 0

Sagebrush (*Artemisia* sp.): 0

Bare ground: 0

Clasping peppergrass (*Lepidium perfoliatum*): 0

Other: 2

### OTHER MEASUREMENTS

Distance to nearest perch: 4.2 m

Perch type: dead sage (placed by researchers)

Height of perch: 95 cm

Distance to irrigated agriculture: 175 m (soybeans)

Distance to nearest road: 165 m (gravel)

Distance to nearest source of water: 175 m (sewage lagoon)

## NESTING HABITAT CHARACTERISTICS

Date: 27 August 1996

Study Area: Kuna Butte

Location Name: SEWAGE POND #1 (SUCCESSFUL)

### BURROW MEASUREMENTS

Burrow entrance height: 14 cm

Burrow entrance width: 17 cm

Height of mound: 10 cm

Compass direction of entrance: 181°

Slope of entrance: 0.445

Distance to nearest burrow: 27.5 m

Number of burrows within 10 m radius: 0

Distance to nearest occupied burrow: 68 m

Livestock manure at burrow entrance: YES

### VEGETATION

Average vegetation height 0.5 m from burrow: 55 cm

Average vegetation height within 2 m radius: 45 cm

Percentage of each ground cover type:

Cheatgrass (*Bromus tectorum*): 90

Rabbitbrush (*Chrysothamnus* sp.): 0

Irrigated agriculture: 0

Tumble mustard (*Sisymbrium altissimum*): 7

Rock: 0

Annual wheatgrass (*Eremopyrum triticeum*): 0

Sagebrush (*Artemisia* sp.): 0

Bare ground: 0

Clasping peppergrass (*Lepidium perfoliatum*): 0

Other: 3

### OTHER MEASUREMENTS

Distance to nearest perch: 0.6 m

Perch type: wooden T-perch (placed by researchers)

Height of perch: 63 cm

Distance to irrigated agriculture: 70 m (wheat)

Distance to nearest road: 59 m (paved)

Distance to nearest source of water: 180 m (sewage lagoon)

## NESTING HABITAT CHARACTERISTICS

Date: 27 August 1996

Study Area: Kuna Butte

Location Name: SEWAGE POND #2 (SUCCESSFUL)

### BURROW MEASUREMENTS

Burrow entrance height: 14 cm

Burrow entrance width: 14 cm

Height of mound: 0 cm

Compass direction of entrance: 58°

Slope of entrance: 0.510

Distance to nearest burrow: 9.0 m

Number of burrows within 10 m radius: 1

Distance to nearest occupied burrow: 68 m

Livestock manure at burrow entrance: YES

### VEGETATION

Average vegetation height 0.5 m from burrow: 35 cm

Average vegetation height within 2 m radius: 40 cm

Percentage of each ground cover type:

Cheatgrass (*Bromus tectorum*): 85

Rabbitbrush (*Chrysothamnus* sp.): 0

Irrigated agriculture: 0

Tumble mustard (*Sisymbrium altissimum*): 5

Rock: 5

Annual wheatgrass (*Eremopyrum triticeum*): 1

Sagebrush (*Artemisia* sp.): 0

Bare ground: 2

Clasping peppergrass (*Lepidium perfoliatum*): 0

Other: 2

### OTHER MEASUREMENTS

Distance to nearest perch: 0.9 m

Perch type: wooden T-perch (placed by researchers)

Height of perch: 65 cm

Distance to irrigated agriculture: 57 m (wheat)

Distance to nearest road: 46 m (gravel)

Distance to nearest source of water: 200 m (sewage lagoon)

## NESTING HABITAT CHARACTERISTICS

Date: 27 August 1996

Study Area: Kuna Butte

Location Name: KUNA BUTTE #1 (SUCCESSFUL)

### BURROW MEASUREMENTS

Burrow entrance height: 12 cm

Burrow entrance width: 20 cm

Height of mound: 5 cm

Compass direction of entrance: 91°

Slope of entrance: 0.554

Distance to nearest burrow: 2.1 m

Number of burrows within 10 m radius: 5

Distance to nearest occupied burrow: 106 m

Livestock manure at burrow entrance: YES

### VEGETATION

Average vegetation height 0.5 m from burrow: 55 cm

Average vegetation height within 2 m radius: 55 cm

Percentage of each ground cover type:

Cheatgrass (*Bromus tectorum*): 80

Rabbitbrush (*Chrysothamnus* sp.): 0

Irrigated agriculture: 0

Tumble mustard (*Sisymbrium altissimum*): 20

Rock: 0

Annual wheatgrass (*Eremopyrum triticeum*): 0

Sagebrush (*Artemisia* sp.): 0

Bare ground: 0

Clasping peppergrass (*Lepidium perfoliatum*): 0

Other: 0

### OTHER MEASUREMENTS

Distance to nearest perch: 0.5 m

Perch type: wooden T-perch (placed by researchers)

Height of perch: 67 cm

Distance to irrigated agriculture: 49 m (peppermint)

Distance to nearest road: 43 m (dirt)

Distance to nearest source of water: 43 m (irrigation ditch)

## NESTING HABITAT CHARACTERISTICS

Date: 27 August 1996

Study Area: Kuna Butte

Location Name: KUNA BUTTE #5 (SUCCESSFUL)

### BURROW MEASUREMENTS

Burrow entrance height: 17 cm

Burrow entrance width: 20 cm

Height of mound: 12 cm

Compass direction of entrance: 105°

Slope of entrance: 0.466

Distance to nearest burrow: 4.8 m

Number of burrows within 10 m radius: 2

Distance to nearest occupied burrow: 106 m

Livestock manure at burrow entrance: YES

### VEGETATION

Average vegetation height 0.5 m from burrow: 45 cm

Average vegetation height within 2 m radius: 48 cm

Percentage of each ground cover type:

Cheatgrass (*Bromus tectorum*): 70

Rabbitbrush (*Chrysothamnus* sp.): 0

Irrigated agriculture: 0

Tumble mustard (*Sisymbrium altissimum*): 30

Rock: 0

Annual wheatgrass (*Eremopyrum triticeum*): 0

Sagebrush (*Artemisia* sp.): 0

Bare ground: 0

Clasping peppergrass (*Lepidium perfoliatum*): 0

Other: 0

### OTHER MEASUREMENTS

Distance to nearest perch: 0.9 m

Perch type: wooden T-perch (placed by researchers)

Height of perch: 77 cm

Distance to irrigated agriculture: 155 m (peppermint)

Distance to nearest road: 95 m (dirt)

Distance to nearest source of water: 155 m (irrigation ditch)



## NESTING HABITAT CHARACTERISTICS

Date: 28 August 1996

Study Area: Kuna Butte

Location Name: KUNA BUTTE #7 (SUCCESSFUL)

### BURROW MEASUREMENTS

Burrow entrance height: 23 cm

Burrow entrance width: 24 cm

Height of mound: 20 cm

Compass direction of entrance: 103°

Slope of entrance: 0.700

Distance to nearest burrow: 4.1 m

Number of burrows within 10 m radius: 3

Distance to nearest occupied burrow: 205 m

Livestock manure at burrow entrance: NO

### VEGETATION

Average vegetation height 0.5 m from burrow: 50 cm

Average vegetation height within 2 m radius: 50 cm

Percentage of each ground cover type:

Cheatgrass (*Bromus tectorum*): 60

Rabbitbrush (*Chrysothamnus* sp.): 0

Irrigated agriculture: 0

Tumble mustard (*Sisymbrium altissimum*): 40

Rock: 0

Annual wheatgrass (*Eremopyrum triticeum*): 0

Sagebrush (*Artemisia* sp.): 0

Bare ground: 0

Clasping peppergrass (*Lepidium perfoliatum*): 0

Other: 0

### OTHER MEASUREMENTS

Distance to nearest perch: 17.1 m

Perch type: dead sage

Height of perch: 73 cm

Distance to irrigated agriculture: 302 m (peppermint)

Distance to nearest road: 22.5 m (dirt)

Distance to nearest source of water: 301 m (irrigation ditch)

## NESTING HABITAT CHARACTERISTICS

Date: 28 August 1996

Study Area: Kuna Butte

Location Name: EFFLUENT FIELD NORTH (SUCCESSFUL)

### BURROW MEASUREMENTS

Burrow entrance height: 13 cm

Burrow entrance width: 20 cm

Height of mound: 10 cm

Compass direction of entrance: 95°

Slope of entrance: 0.601

Distance to nearest burrow: 2.6 m

Number of burrows within 10 m radius: 5

Distance to nearest occupied burrow: 685 m

Livestock manure at burrow entrance: NO

### VEGETATION

Average vegetation height 0.5 m from burrow: 50 cm

Average vegetation height within 2 m radius: 60 cm

Percentage of each ground cover type:

Cheatgrass (*Bromus tectorum*): 60

Rabbitbrush (*Chrysothamnus* sp.): 0

Irrigated agriculture: 1

Tumble mustard (*Sisymbrium altissimum*): 10

Rock: 0

Annual wheatgrass (*Eremopyrum triticeum*): 0

Sagebrush (*Artemisia* sp.): 0

Bare ground: 2

Clasping peppergrass (*Lepidium perfoliatum*): 20

Other: 7

### OTHER MEASUREMENTS

Distance to nearest perch: 45.5 m

Perch type: metal fence post

Height of perch: 45.5 cm

Distance to irrigated agriculture: 46 m (sugar beets)

Distance to nearest road: 32 m (dirt)

Distance to nearest source of water: 46 m (irrigation ditch)

## NESTING HABITAT CHARACTERISTICS

Date: 28 August 1996

Study Area: Kuna Butte

Location Name: EFFLUENT FIELD SOUTH (SUCCESSFUL)

### BURROW MEASUREMENTS

Burrow entrance height: 20 cm

Burrow entrance width: 23 cm

Height of mound: 13 cm

Compass direction of entrance: 163°

Slope of entrance: 0.869

Distance to nearest burrow: 5.1 m

Number of burrows within 10 m radius: 3

Distance to nearest occupied burrow: 685 m

Livestock manure at burrow entrance: NO

### VEGETATION

Average vegetation height 0.5 m from burrow: 70 cm

Average vegetation height within 2 m radius: 70 cm

Percentage of each ground cover type:

Cheatgrass (*Bromus tectorum*): 10

Rabbitbrush (*Chrysothamnus* sp.): 0

Irrigated agriculture: 0

Tumble mustard (*Sisymbrium altissimum*): 80

Rock: 0

Annual wheatgrass (*Eremopyrum triticeum*): 0

Sagebrush (*Artemisia* sp.): 5

Bare ground: 5

Clasping peppergrass (*Lepidium perfoliatum*): 0

Other: 0

### OTHER MEASUREMENTS

Distance to nearest perch: 3.3 m

Perch type: dead sage

Height of perch: 100 cm

Distance to irrigated agriculture: 57.5 m (peppermint)

Distance to nearest road: 48.5 m (paved)

Distance to nearest source of water: 57.5 m (irrigation ditch)

## NESTING HABITAT CHARACTERISTICS

Date: 28 August 1996

Study Area: Kuna Butte

Location Name: **SWAN FALLS #3 (SUCCESSFUL)**

### BURROW MEASUREMENTS

Burrow entrance height: 17 cm

Burrow entrance width: 20 cm

Height of mound: 11 cm

Compass direction of entrance: 30°

Slope of entrance: 0.577

Distance to nearest burrow: 2.6 m

Number of burrows within 10 m radius: 4

Distance to nearest occupied burrow: 1307 m

Livestock manure at burrow entrance: NO

### VEGETATION

Average vegetation height 0.5 m from burrow: N/A - **burned prior to measurements**

Average vegetation height within 2 m radius: N/A - **burned prior to measurements**

Percentage of each ground cover type: N/A - **burned prior to measurements**

Cheatgrass (*Bromus tectorum*):

Rabbitbrush (*Chrysothamnus* sp.):

Irrigated agriculture:

Tumble mustard (*Sisymbrium altissimum*):

Rock:

Annual wheatgrass (*Eremopyrum triticeum*):

Sagebrush (*Artemisia* sp.):

Bare ground:

Clasping peppergrass (*Lepidium perfoliatum*):

Other:

### OTHER MEASUREMENTS

Distance to nearest perch: 1.2 m

Perch type: metal fence post

Height of perch: 101 cm

Distance to irrigated agriculture: 580 m (sugar beets)

Distance to nearest road: 8.4 m (paved)

Distance to nearest source of water: 580 m (irrigation ditch)

## NESTING HABITAT CHARACTERISTICS

Date: 28 August 1996

Study Area: Kuna Butte

Location Name: SWAN FALLS #4 (SUCCESSFUL)

### BURROW MEASUREMENTS

Burrow entrance height: 13 cm

Burrow entrance width: 21 cm

Height of mound: 10 cm

Compass direction of entrance: 302°

Slope of entrance: 0.384

Distance to nearest burrow: 4.9 m

Number of burrows within 10 m radius: 2

Distance to nearest occupied burrow: 450 m

Livestock manure at burrow entrance: YES

### VEGETATION

Average vegetation height 0.5 m from burrow: N/A

Average vegetation height within 2 m radius: N/A

Percentage of each ground cover type:

Cheatgrass (*Bromus tectorum*): 40

Rabbitbrush (*Chrysothamnus* sp.): 0

Irrigated agriculture: 0

Tumble mustard (*Sisymbrium altissimum*): 50

Rock: 0

Annual wheatgrass (*Eremopyrum triticeum*): 0

Sagebrush (*Artemisia* sp.): 0

Bare ground: 0

Clasping peppergrass (*Lepidium perfoliatum*): 0

Other: 10

### OTHER MEASUREMENTS

Distance to nearest perch: 66.3 m

Perch type: metal fence post

Height of perch: 110 cm

Distance to irrigated agriculture: 525 m (alfalfa)

Distance to nearest road: 54 m (paved)

Distance to nearest source of water: 150 m (dairy farm)

## NESTING HABITAT CHARACTERISTICS

Date: 18 September 1996

Study Area: Kuna Butte

Location Name: KUNA CAVE #2 (SUCCESSFUL)

### BURROW MEASUREMENTS

Burrow entrance height: 12 cm

Burrow entrance width: 21 cm

Height of mound: 9 cm

Compass direction of entrance: 285°

Slope of entrance: 0.466

Distance to nearest burrow: 3.1 m

Number of burrows within 10 m radius: 11

Distance to nearest occupied burrow: 208 m

Livestock manure at burrow entrance: NO

### VEGETATION

Average vegetation height 0.5 m from burrow: 65 cm

Average vegetation height within 2 m radius: 65 cm

Percentage of each ground cover type:

Cheatgrass (*Bromus tectorum*): 30

Rabbitbrush (*Chrysothamnus* sp.): 0

Irrigated agriculture: 0

Tumble mustard (*Sisymbrium altissimum*): 70

Rock: 0

Annual wheatgrass (*Eremopyrum triticeum*): 0

Sagebrush (*Artemisia* sp.): 0

Bare ground: 0

Clasping peppergrass (*Lepidium perfoliatum*): 0

Other: 0

### OTHER MEASUREMENTS

Distance to nearest perch: 0.7 m

Perch type: wooden T-perch (placed by researchers)

Height of perch: 104 cm

Distance to irrigated agriculture: 115 m (alfalfa)

Distance to nearest road: 600 m (paved)

Distance to nearest source of water: 110 m (irrigation ditch)

## NESTING HABITAT CHARACTERISTICS

Date: 18 September 1996

Study Area: Kuna Butte

Location Name: KUNA CAVE #3 (SUCCESSFUL)

### BURROW MEASUREMENTS

Burrow entrance height: 14 cm

Burrow entrance width: 21 cm

Height of mound: 10 cm

Compass direction of entrance: 90°

Slope of entrance: 0.445

Distance to nearest burrow: 6.7 m

Number of burrows within 10 m radius: 2

Distance to nearest occupied burrow: 208 m

Livestock manure at burrow entrance: NO

### VEGETATION

Average vegetation height 0.5 m from burrow: 65 cm

Average vegetation height within 2 m radius: 68 cm

Percentage of each ground cover type:

Cheatgrass (*Bromus tectorum*): 50

Rabbitbrush (*Chrysothamnus* sp.): 0

Irrigated agriculture: 0

Tumble mustard (*Sisymbrium altissimum*): 50

Rock: 0

Annual wheatgrass (*Eremopyrum triticeum*): 0

Sagebrush (*Artemisia* sp.): 0

Bare ground: 0

Clasping peppergrass (*Lepidium perfoliatum*): 0

Other: 0

### OTHER MEASUREMENTS

Distance to nearest perch: 42 m

Perch type: dead sage

Height of perch: 45 cm

Distance to irrigated agriculture: 112 m (alfalfa)

Distance to nearest road: 600 m (paved)

Distance to nearest source of water: 112 m (irrigation ditch)

## NESTING HABITAT CHARACTERISTICS

Date: 18 September 1996

Study Area: Kuna Butte

Location Name: JOHN HAYES #1 (SUCCESSFUL)

### BURROW MEASUREMENTS

Burrow entrance height: 12 cm

Burrow entrance width: 18 cm

Height of mound: 7 cm

Compass direction of entrance: 252°

Slope of entrance: 0.424

Distance to nearest burrow: 37 m

Number of burrows within 10 m radius: 0

Distance to nearest occupied burrow: N/A

Livestock manure at burrow entrance: NO

### VEGETATION

Average vegetation height 0.5 m from burrow: 63 cm

Average vegetation height within 2 m radius: 63 cm

Percentage of each ground cover type:

Cheatgrass (*Bromus tectorum*): 60

Rabbitbrush (*Chrysothamnus* sp.): 0

Irrigated agriculture: 0

Tumble mustard (*Sisymbrium altissimum*): 40

Rock: 0

Annual wheatgrass (*Eremopyrum triticeum*): 0

Sagebrush (*Artemisia* sp.): 0

Bare ground: 0

Clasping peppergrass (*Lepidium perfoliatum*): 0

Other: 0

### OTHER MEASUREMENTS

Distance to nearest perch: 12.4 m

Perch type: metal fence post

Height of perch: 120 cm

Distance to irrigated agriculture: 400 m (peppermint)

Distance to nearest road: 10 m (dirt)

Distance to nearest source of water: 300 m (creek)



## NESTING HABITAT CHARACTERISTICS

Date: 18 September 1996

Study Area: Kuna Butte

Location Name: B. STEWART #1 (SUCCESSFUL)

### BURROW MEASUREMENTS

Burrow entrance height: 14 cm

Burrow entrance width: 21 cm

Height of mound: 1 cm

Compass direction of entrance: 254°

Slope of entrance: 0.466

Distance to nearest burrow: 3.6 m

Number of burrows within 10 m radius: 5

Distance to nearest occupied burrow: 109 m

Livestock manure at burrow entrance: YES

### VEGETATION

Average vegetation height 0.5 m from burrow: 32 cm

Average vegetation height within 2 m radius: 32 cm

Percentage of each ground cover type:

Cheatgrass (*Bromus tectorum*): 40

Rabbitbrush (*Chrysothamnus* sp.): 0

Irrigated agriculture: 0

Tumble mustard (*Sisymbrium altissimum*): 60

Rock: 0

Annual wheatgrass (*Eremopyrum triticeum*): 0

Sagebrush (*Artemisia* sp.): 0

Bare ground: 0

Clasping peppergrass (*Lepidium perfoliatum*): 0

Other: 0

### OTHER MEASUREMENTS

Distance to nearest perch: 17.0 m

Perch type: metal fence post

Height of perch: 140 cm

Distance to irrigated agriculture: 490 m (wheat)

Distance to nearest road: 71 m (gravel)

Distance to nearest source of water: 35 m (irrigation ditch)

## NESTING HABITAT CHARACTERISTICS

Date: 18 September 1996

Study Area: Kuna Butte

Location Name: B. STEWART #2 (SUCCESSFUL)

### BURROW MEASUREMENTS

Burrow entrance height: 15 cm

Burrow entrance width: 22 cm

Height of mound: 3 cm

Compass direction of entrance: 213°

Slope of entrance: 0.404

Distance to nearest burrow: 3.2 m

Number of burrows within 10 m radius: 5

Distance to nearest occupied burrow: 109 m

Livestock manure at burrow entrance: YES

### VEGETATION

Average vegetation height 0.5 m from burrow: 66 cm

Average vegetation height within 2 m radius: 60 cm

Percentage of each ground cover type:

Cheatgrass (*Bromus tectorum*): 50

Rabbitbrush (*Chrysothamnus* sp.): 0

Irrigated agriculture: 0

Tumble mustard (*Sisymbrium altissimum*): 50

Rock: 0

Annual wheatgrass (*Eremopyrum triticeum*): 0

Sagebrush (*Artemisia* sp.): 0

Bare ground: 0

Clasping peppergrass (*Lepidium perfoliatum*): 0

Other: 0

### OTHER MEASUREMENTS

Distance to nearest perch: 13.5 m

Perch type: metal fence post

Height of perch: 140 cm

Distance to irrigated agriculture: 500 m (wheat)

Distance to nearest road: 91 m (gravel)

Distance to nearest source of water: 144 m (irrigation ditch)

## NESTING HABITAT CHARACTERISTICS

Date: 18 September 1996

Study Area: Kuna Butte

Location Name: IBP #2 (SUCCESSFUL)

### BURROW MEASUREMENTS

Burrow entrance height: 14 cm

Burrow entrance width: 26 cm

Height of mound: 4 cm

Compass direction of entrance: 209°

Slope of entrance: 0.424

Distance to nearest burrow: 15 m

Number of burrows within 10 m radius: 0

Distance to nearest occupied burrow: N/A

Livestock manure at burrow entrance: NO

### VEGETATION

Average vegetation height 0.5 m from burrow: 40 cm

Average vegetation height within 2 m radius: 30 cm

Percentage of each ground cover type:

Cheatgrass (*Bromus tectorum*): 95

Rabbitbrush (*Chrysothamnus* sp.): 0

Irrigated agriculture: 0

Tumble mustard (*Sisymbrium altissimum*): 0

Rock: 0

Annual wheatgrass (*Eremopyrum triticeum*): 0

Sagebrush (*Artemisia* sp.): 0

Bare ground: 0

Clasping peppergrass (*Lepidium perfoliatum*): 0

Other: 5

### OTHER MEASUREMENTS

Distance to nearest perch: 24.2 m

Perch type: metal fence post

Height of perch: 140 cm

Distance to irrigated agriculture: 120 m (alfalfa)

Distance to nearest road: 61 m (dirt)

Distance to nearest source of water: 120 m (irrigation ditch)

## NESTING HABITAT CHARACTERISTICS

Date: 16 September 1996

Study Area: Grand View

Location Name: TRAILER #1 (SUCCESSFUL)

### BURROW MEASUREMENTS

Burrow entrance height: 12 cm

Burrow entrance width: 20 cm

Height of mound: 10 cm

Compass direction of entrance: 40°

Slope of entrance: 0.625

Distance to nearest burrow: 50 m

Number of burrows within 10 m radius: 0

Distance to nearest occupied burrow: 219 m

Livestock manure at burrow entrance: YES

### VEGETATION

Average vegetation height 0.5 m from burrow: 15 cm

Average vegetation height within 2 m radius: 17 cm

Percentage of each ground cover type:

Cheatgrass (*Bromus tectorum*): 0

Rabbitbrush (*Chrysothamnus* sp.): 0

Irrigated agriculture: 0

Tumble mustard (*Sisymbrium altissimum*): 0

Rock: 0

Annual wheatgrass (*Eremopyrum triticeum*): 75

Sagebrush (*Artemisia* sp.): 0

Bare ground: 1

Clasping peppergrass (*Lepidium perfoliatum*): 24

Other: 0

### OTHER MEASUREMENTS

Distance to nearest perch: 2.1 m

Perch type: metal fence post

Height of perch: 132 cm

Distance to irrigated agriculture: 85 m (alfalfa)

Distance to nearest road: 56 m (gravel)

Distance to nearest source of water: 85 m (irrigation)

## NESTING HABITAT CHARACTERISTICS

Date: 16 September 1996

Study Area: Grand View

Location Name: TRAILER #2 (SUCCESSFUL)

### BURROW MEASUREMENTS

Burrow entrance height: 16 cm

Burrow entrance width: 21 cm

Height of mound: 13 cm

Compass direction of entrance: 55°

Slope of entrance: 0.466

Distance to nearest burrow: 7.6 m

Number of burrows within 10 m radius: 2

Distance to nearest occupied burrow: 11.2 m

Livestock manure at burrow entrance: YES

### VEGETATION

Average vegetation height 0.5 m from burrow: 19 cm

Average vegetation height within 2 m radius: 22 cm

Percentage of each ground cover type:

Cheatgrass (*Bromus tectorum*): 30

Rabbitbrush (*Chrysothamnus* sp.): 0

Irrigated agriculture: 5

Tumble mustard (*Sisymbrium altissimum*): 0

Rock: 0

Annual wheatgrass (*Eremopyrum triticeum*): 53

Sagebrush (*Artemisia* sp.): 0

Bare ground: 2

Clasping peppergrass (*Lepidium perfoliatum*): 10

Other: 0

### OTHER MEASUREMENTS

Distance to nearest perch: 42.7 m

Perch type: metal fence post

Height of perch: 118 cm

Distance to irrigated agriculture: 43 m (alfalfa)

Distance to nearest road: 43 m (dirt)

Distance to nearest source of water: 43 m (irrigation)

## NESTING HABITAT CHARACTERISTICS

Date: 16 September 1996

Study Area: Grand View

Location Name: TRAILER #3 (SUCCESSFUL)

### BURROW MEASUREMENTS

Burrow entrance height: 15 cm

Burrow entrance width: 18 cm

Height of mound: 5 cm

Compass direction of entrance: 98°

Slope of entrance: 0.510

Distance to nearest burrow: 11.2 m

Number of burrows within 10 m radius: 0

Distance to nearest occupied burrow: 11.2 m

Livestock manure at burrow entrance: YES

### VEGETATION

Average vegetation height 0.5 m from burrow: 19 cm

Average vegetation height within 2 m radius: 22 cm

Percentage of each ground cover type:

Cheatgrass (*Bromus tectorum*): 30

Rabbitbrush (*Chrysothamnus* sp.): 0

Irrigated agriculture: 5

Tumble mustard (*Sisymbrium altissimum*): 0

Rock: 0

Annual wheatgrass (*Eremopyrum triticeum*): 53

Sagebrush (*Artemisia* sp.): 0

Bare ground: 2

Clasping peppergrass (*Lepidium perfoliatum*): 10

Other: 0

### OTHER MEASUREMENTS

Distance to nearest perch: 37.2 m

Perch type: metal fence post

Height of perch: 120 cm

Distance to irrigated agriculture: 37.5 m (alfalfa)

Distance to nearest road: 21.8 m (dirt)

Distance to nearest source of water: 37.5 m (irrigation)

## NESTING HABITAT CHARACTERISTICS

Date: 16 September 1996

Study Area: Grand View

Location Name: WELL #1 (SUCCESSFUL)

### BURROW MEASUREMENTS

Burrow entrance height: 17 cm

Burrow entrance width: 21 cm

Height of mound: 8 cm

Compass direction of entrance: 341°

Slope of entrance: 0.649

Distance to nearest burrow: 364 m

Number of burrows within 10 m radius: 0

Distance to nearest occupied burrow: 64 m

Livestock manure at burrow entrance: NO

### VEGETATION

Average vegetation height 0.5 m from burrow: 20 cm

Average vegetation height within 2 m radius: 20 cm

Percentage of each ground cover type:

Cheatgrass (*Bromus tectorum*): 10

Rabbitbrush (*Chrysothamnus* sp.): 0

Irrigated agriculture: 0

Tumble mustard (*Sisymbrium altissimum*): 0

Rock: 0

Annual wheatgrass (*Eremopyrum triticeum*): 50

Sagebrush (*Artemisia* sp.): 0

Bare ground: 2

Clasping peppergrass (*Lepidium perfoliatum*): 38

Other: 0

### OTHER MEASUREMENTS

Distance to nearest perch: 1.0 m

Perch type: burrow mound

Height of perch: 8 cm

Distance to irrigated agriculture: 139 m (sugar beets)

Distance to nearest road: 43 m (gravel)

Distance to nearest source of water: 139 m (irrigation)

## NESTING HABITAT CHARACTERISTICS

Date: 16 September 1996

Study Area: Grand View

Location Name: WELL #2 (SUCCESSFUL)

### BURROW MEASUREMENTS

Burrow entrance height: 14 cm

Burrow entrance width: 19 cm

Height of mound: 14 cm

Compass direction of entrance: 37°

Slope of entrance: 0.554

Distance to nearest burrow: 48.5 m

Number of burrows within 10 m radius: 0

Distance to nearest occupied burrow: 64 m

Livestock manure at burrow entrance: NO (but pronghorn dung present)

### VEGETATION

Average vegetation height 0.5 m from burrow: 20 cm

Average vegetation height within 2 m radius: 20 cm

Percentage of each ground cover type:

Cheatgrass (*Bromus tectorum*): 10

Rabbitbrush (*Chrysothamnus* sp.): 0

Irrigated agriculture: 0

Tumble mustard (*Sisymbrium altissimum*): 0

Rock: 0

Annual wheatgrass (*Eremopyrum triticeum*): 60

Sagebrush (*Artemisia* sp.): 0

Bare ground: 2

Clasping peppergrass (*Lepidium perfoliatum*): 28

Other: 0

### OTHER MEASUREMENTS

Distance to nearest perch: 20.4 m

Perch type: dirt mound

Height of perch: 40 cm

Distance to irrigated agriculture: 75 m (sugar beets)

Distance to nearest road: 22.5 m (gravel)

Distance to nearest source of water: 75 m (irrigation)



## NESTING HABITAT CHARACTERISTICS

Date: 21 September 1996

Study Area: Grand View

Location Name: TRAILERVIEW (UNSUCCESSFUL)

### BURROW MEASUREMENTS

Burrow entrance height: 14 cm

Burrow entrance width: 21 cm

Height of mound: 10 cm

Compass direction of entrance: 32°

Slope of entrance: 0.649

Distance to nearest burrow: 3.0 m

Number of burrows within 10 m radius: 2

Distance to nearest occupied burrow: 424 m

Livestock manure at burrow entrance: NO

### VEGETATION

Average vegetation height 0.5 m from burrow: 10 cm

Average vegetation height within 2 m radius: 19 cm

Percentage of each ground cover type:

Cheatgrass (*Bromus tectorum*): 10

Rabbitbrush (*Chrysothamnus* sp.): 0

Irrigated agriculture: 0

Tumble mustard (*Sisymbrium altissimum*): 0

Rock: 0

Annual wheatgrass (*Eremopyrum triticeum*): 60

Sagebrush (*Artemisia* sp.): 0

Bare ground: 0

Clasping peppergrass (*Lepidium perfoliatum*): 30

Other:

### OTHER MEASUREMENTS

Distance to nearest perch: 0.7 m

Perch type: burrow mound

Height of perch: 10 cm

Distance to irrigated agriculture: 225 m (potatoes)

Distance to nearest road: 38 m (gravel)

Distance to nearest source of water: 225 m (irrigation)

## NESTING HABITAT CHARACTERISTICS

Date: 16 September 1996  
Study Area: Grand View  
Location Name: BAHA #1 (SUCCESSFUL)

### BURROW MEASUREMENTS

Burrow entrance height: 19 cm  
Burrow entrance width: 21 cm  
Height of mound: 11 cm  
Compass direction of entrance: 179°  
Slope of entrance: 0.404  
Distance to nearest burrow: 22.1 m  
Number of burrows within 10 m radius: 0  
Distance to nearest occupied burrow: 735 m  
Livestock manure at burrow entrance: NO

### VEGETATION

Average vegetation height 0.5 m from burrow: 16 cm  
Average vegetation height within 2 m radius: 25 cm  
Percentage of each ground cover type:  
Cheatgrass (*Bromus tectorum*): 80  
Rabbitbrush (*Chrysothamnus* sp.): 0  
Irrigated agriculture: 0  
Tumble mustard (*Sisymbrium altissimum*): 17  
Rock: 0  
Annual wheatgrass (*Eremopyrum triticeum*): 0  
Sagebrush (*Artemisia* sp.): 0  
Bare ground: 3  
Clasping peppergrass (*Lepidium perfoliatum*): 0  
Other: 0

### OTHER MEASUREMENTS

Distance to nearest perch: 8.1 m  
Perch type: dead sage  
Height of perch: 56 cm  
Distance to irrigated agriculture: 51 m (sugar beets)  
Distance to nearest road: 45 m (dirt)  
Distance to nearest source of water: 51 m (irrigation)

## NESTING HABITAT CHARACTERISTICS

Date: 21 September 1996

Study Area: Grand View

Location Name: GRANDVIEW #19 (SUCCESSFUL)

### BURROW MEASUREMENTS

Burrow entrance height: 14 cm

Burrow entrance width: 19 cm

Height of mound: 4 cm

Compass direction of entrance: 17°

Slope of entrance: 0.384

Distance to nearest burrow: 2.2 m

Number of burrows within 10 m radius: 7

Distance to nearest occupied burrow: 54 m

Livestock manure at burrow entrance: NO

### VEGETATION

Average vegetation height 0.5 m from burrow: 32 cm

Average vegetation height within 2 m radius: 34 cm

Percentage of each ground cover type:

Cheatgrass (*Bromus tectorum*): 80

Rabbitbrush (*Chrysothamnus* sp.): 0

Irrigated agriculture: 0

Tumble mustard (*Sisymbrium altissimum*): 0

Rock: 0

Annual wheatgrass (*Eremopyrum triticeum*): 0

Sagebrush (*Artemisia* sp.): 0

Bare ground: 0

Clasping peppergrass (*Lepidium perfoliatum*): 0

Other: 20

### OTHER MEASUREMENTS

Distance to nearest perch: 242m

Perch type: metal fence post

Height of perch: 140 cm

Distance to irrigated agriculture: 50 m (potatoes)

Distance to nearest road: 43 m (gravel)

Distance to nearest source of water: 50 m (irrigation)

## NESTING HABITAT CHARACTERISTICS

Date: 21 September 1996

Study Area: Grand View

Location Name: GRANDVIEW #2 (SUCCESSFUL)

### BURROW MEASUREMENTS

Burrow entrance height: 14 cm

Burrow entrance width: 16 cm

Height of mound: 3 cm

Compass direction of entrance: 336°

Slope of entrance: 0.466

Distance to nearest burrow: 3.4 m

Number of burrows within 10 m radius: 2

Distance to nearest occupied burrow: 54 m

Livestock manure at burrow entrance: YES

### VEGETATION

Average vegetation height 0.5 m from burrow: 28 cm

Average vegetation height within 2 m radius: 30 cm

Percentage of each ground cover type:

Cheatgrass (*Bromus tectorum*): 90

Rabbitbrush (*Chrysothamnus* sp.): 0

Irrigated agriculture: 0

Tumble mustard (*Sisymbrium altissimum*): 7

Rock: 0

Annual wheatgrass (*Eremopyrum triticeum*): 0

Sagebrush (*Artemisia* sp.): 0

Bare ground: 0

Clasping peppergrass (*Lepidium perfoliatum*): 0

Other: 3

### OTHER MEASUREMENTS

Distance to nearest perch: 46 m

Perch type: metal fence post

Height of perch: 140 cm

Distance to irrigated agriculture: 50 m (potatoes)

Distance to nearest road: 47 m (gravel)

Distance to nearest source of water: 50 m (irrigation)

## NESTING HABITAT CHARACTERISTICS

Date: 21 September 1996

Study Area: Grand View

Location Name: SUBSTATION SOUTH #1 (SUCCESSFUL)

### BURROW MEASUREMENTS

Burrow entrance height: 8 cm

Burrow entrance width: 15 cm

Height of mound: 5 cm

Compass direction of entrance: 15°

Slope of entrance: 0.466

Distance to nearest burrow: 54 m

Number of burrows within 10 m radius: 0

Distance to nearest occupied burrow: 54 m

Livestock manure at burrow entrance: YES

### VEGETATION

Average vegetation height 0.5 m from burrow: 27 cm

Average vegetation height within 2 m radius: 27 cm

Percentage of each ground cover type:

Cheatgrass (*Bromus tectorum*): 10

Rabbitbrush (*Chrysothamnus* sp.): 0

Irrigated agriculture: 0

Tumble mustard (*Sisymbrium altissimum*): 70

Rock: 0

Annual wheatgrass (*Eremopyrum triticeum*): 20

Sagebrush (*Artemisia* sp.): 0

Bare ground: 0

Clasping peppergrass (*Lepidium perfoliatum*): 0

Other: 0

### OTHER MEASUREMENTS

Distance to nearest perch: N/A

Perch type: N/A

Height of perch: N/A

Distance to irrigated agriculture: 90 m (sugar beets)

Distance to nearest road: 70 m (gravel)

Distance to nearest source of water: 85 m (irrigation well)

## NESTING HABITAT CHARACTERISTICS

Date: 21 September 1996

Study Area: Grand View

Location Name: SUBSTATION SOUTH #2 (SUCCESSFUL)

### BURROW MEASUREMENTS

Burrow entrance height: 10 cm

Burrow entrance width: 12 cm

Height of mound: 2 cm

Compass direction of entrance: 128°

Slope of entrance: 0.364

Distance to nearest burrow: 38.3 m

Number of burrows within 10 m radius: 0

Distance to nearest occupied burrow: 38.3 m

Livestock manure at burrow entrance: NO

### VEGETATION

Average vegetation height 0.5 m from burrow: 23 cm

Average vegetation height within 2 m radius: 23 cm

Percentage of each ground cover type:

Cheatgrass (*Bromus tectorum*): 0

Rabbitbrush (*Chrysothamnus* sp.): 0

Irrigated agriculture: 0

Tumble mustard (*Sisymbrium altissimum*): 2

Rock: 0

Annual wheatgrass (*Eremopyrum triticeum*): 95

Sagebrush (*Artemisia* sp.): 0

Bare ground: 3

Clasping peppergrass (*Lepidium perfoliatum*): 0

Other: 0

### OTHER MEASUREMENTS

Distance to nearest perch: N/A

Perch type: N/A

Height of perch: N/A

Distance to irrigated agriculture: 125 m (sugar beets)

Distance to nearest road: 120 m (dirt)

Distance to nearest source of water: 145 m (irrigation well)

## NESTING HABITAT CHARACTERISTICS

Date: 21 September 1996

Study Area: Grand View

Location Name: SUBSTATION SOUTH #3 (SUCCESSFUL)

### BURROW MEASUREMENTS

Burrow entrance height: 10 cm

Burrow entrance width: 21 cm

Height of mound: 14 cm

Compass direction of entrance: 225°

Slope of entrance: 0.532

Distance to nearest burrow: 50.0 m

Number of burrows within 10 m radius: 0

Distance to nearest occupied burrow: 234 m

Livestock manure at burrow entrance: NO

### VEGETATION

Average vegetation height 0.5 m from burrow: 27 cm

Average vegetation height within 2 m radius: 27 cm

Percentage of each ground cover type:

Cheatgrass (*Bromus tectorum*): 90

Rabbitbrush (*Chrysothamnus* sp.): 0

Irrigated agriculture: 0

Tumble mustard (*Sisymbrium altissimum*): 9

Rock: 0

Annual wheatgrass (*Eremopyrum triticeum*): 0

Sagebrush (*Artemisia* sp.): 1

Bare ground: 0

Clasping peppergrass (*Lepidium perfoliatum*): 0

Other: 0

### OTHER MEASUREMENTS

Distance to nearest perch: 25 m

Perch type: living Sagebrush (*Artemisia* sp.)

Height of perch: 70 cm

Distance to irrigated agriculture: 135 m (sugar beets)

Distance to nearest road: 100 m (gravel)

Distance to nearest source of water: 120 m (irrigation well)

## NESTING HABITAT CHARACTERISTICS

Date: 21 September 1996

Study Area: Grand View

Location Name: SUBSTATION SOUTH #4 (SUCCESSFUL)

### BURROW MEASUREMENTS

Burrow entrance height: 14 cm

Burrow entrance width: 23 cm

Height of mound: 10 cm

Compass direction of entrance: 124°

Slope of entrance: 0.488

Distance to nearest burrow: 9.2 m

Number of burrows within 10 m radius: 2

Distance to nearest occupied burrow: 903 m

Livestock manure at burrow entrance: YES

### VEGETATION

Average vegetation height 0.5 m from burrow: 48 cm

Average vegetation height within 2 m radius: 33 cm

Percentage of each ground cover type:

Cheatgrass (*Bromus tectorum*): 5

Rabbitbrush (*Chrysothamnus* sp.): 0

Irrigated agriculture: 0

Tumble mustard (*Sisymbrium altissimum*): 95

Rock: 0

Annual wheatgrass (*Eremopyrum triticeum*): 0

Sagebrush (*Artemisia* sp.): 0

Bare ground: 0

Clasping peppergrass (*Lepidium perfoliatum*): 0

Other: 0

### OTHER MEASUREMENTS

Distance to nearest perch: 63 m

Perch type: wooden metal fence post

Height of perch: 145 cm

Distance to irrigated agriculture: 67 m (sugar beets)

Distance to nearest road: 64 m (gravel)

Distance to nearest source of water: 67 m (irrigation well)



## NESTING HABITAT CHARACTERISTICS

Date: 21 September 1996

Study Area: Grand View

Location Name: SUBSTATION EAST #1 (SUCCESSFUL)

### BURROW MEASUREMENTS

Burrow entrance height: 12 cm

Burrow entrance width: 16 cm

Height of mound: 15 cm

Compass direction of entrance: 320°

Slope of entrance: 0.404

Distance to nearest burrow: 6.9 m

Number of burrows within 10 m radius: 1

Distance to nearest occupied burrow: 452 m

Livestock manure at burrow entrance: YES

### VEGETATION

Average vegetation height 0.5 m from burrow: 16 cm

Average vegetation height within 2 m radius: 16 cm

Percentage of each ground cover type:

Cheatgrass (*Bromus tectorum*): 5

Rabbitbrush (*Chrysothamnus* sp.): 0

Irrigated agriculture: 0

Tumble mustard (*Sisymbrium altissimum*): 5

Rock: 0

Annual wheatgrass (*Eremopyrum triticeum*): 90

Sagebrush (*Artemisia* sp.): 0

Bare ground: 0

Clasping peppergrass (*Lepidium perfoliatum*): 0

Other: 0

### OTHER MEASUREMENTS

Distance to nearest perch: 61 m

Perch type: metal fence post

Height of perch: 124 cm

Distance to irrigated agriculture: 580 m (sugar beets)

Distance to nearest road: 76 m (paved)

Distance to nearest source of water: 580 m (irrigation)



**Bureau of Land Management**

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